



CULTURE AND NATURE: THE EUROPEAN HERITAGE OF
SHEEP FARMING AND PASTORAL LIFE

RESEARCH THEME: CASE STUDIES

RESEARCH REPORT FOR THE UK

By Gemma Bell and Simon Bell

Estonian University of Life Sciences

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Case study 1: Intensive mixed arable and sheep farm where the sheep are raised for meat production

The interviewee is a 37 year old married farmer with two children of 8 and 6 years. The farm is a lowland farm near Blackburn in Lancashire in England. The farmer has a foundation degree in agriculture from a local agricultural college.

The farmer raises three different types of breeding ewes on his 622 hectares of land. These are 500 Mule (progeny of a Swaledale Ewe and a Blue faced Leicester), 200 Texel X Mule and 100 Beltex sheep. The land is partly in the ownership of the farmer (381 ha) and partly rented land (241 ha) nearby. This is the only livestock raised on the farm. There are 800 breeding ewes and 20 rams. The lambs are born and raised and remain on the holding until large enough to be sold as “stores” to farmers who “finish” the lambs ready for the meat industry. Thus the farmer only supplies pre-finished products and is part of the meat supply chain. The farm is a lowland mainly arable farm lying between 120 and 150 m above sea level, with free draining loamy soil. The farmer sows stubble turnips to provide feed for the sheep as part of the arable crop rotation. The farm is divided into fields with a mixture of hedges and wire fences as boundaries. Some land – around 10ha is waterlogged and of limited value for grazing. Grazing is mainly on rotational grassland although there are areas of permanent grassland. Winter fodder of hay is also grown on the farm.

The lambing percentages are an average of 2.6 lambs per ewe per year with a mortality ration of around 10% of the lamb crop; 6% at birth and 4% in the first month following birth.

The farmstead comprises a mixture of traditional stone buildings from the 19th century (some 150 years old) and a set of modern buildings constructed between 1998 and 2001. The stone barns are small and are just used for machinery storage. The modern buildings are designed to house some of the ewes over the lambing period.

The technical equipment for the arable side of the farm is rather extensive but not much is used for on the sheep enterprise apart from moving animals and feedstuffs. Tractors and machinery are used little on the sheep enterprise. Equipment for dosing and injecting sheep, for shearing and other aspects of sheep husbandry is also kept. Electronic identification tags are also used as a legal requirement and also for lamb management.

Along with the rest of the farm herbicides and pesticides are used to control weeds and pests, artificial fertilisers are used to boost grass production and veterinary products are also used. Fuels are stored on the farm. The legal requirements for pesticide and fuel use are observed in relation to environmental effects and operator health and safety. No more agro-chemicals than are absolutely necessary, partly because of the expense. Production is therefore conventional and there are no plans to introduce organic production.

The lambs are sold as follows: 200 are normally sold live direct to a neighbour to finish them while the rest are sold live via local auction marts to other farmers in the region who finish them off for meat production, unless gimmer (young female) lambs are kept on the farmstead as breeding replacements. The mix of species is 62.5% Mule ewes, 25% Texel ewes and 12.5% Beltex ewes. In terms of the technical management of sheep, rams from selected genetic lines with high estimated breeding values are used to mate the ewes to produce better lambs for the meat trade. Apart from the arable enterprise, which means that the farm has some diversity, the only other attempt to diversify income generation from non-agricultural products is a small campsite for walkers, which occupies 2.3 ha.

The farmer is the full time manager of the farm and he runs it with 6 workers including himself, his wife, two general farm workers who mainly work on the arable enterprise and two seasonal shepherds who also shear the sheep on a contract basis. The family labour force consist therefore of the farmer and his wife.

The commercial objectives of the farmer are paramount: to run a profitable sheep enterprise in balance with a profitable arable enterprise. The farmer emphasised his idea of the two being in harmony or balance. Lamb production is around 1600 lambs per year and in addition cull ewes are also sold off through the auction marts and bring in some additional income.

The inputs into the system and their costs are:

Feed produced on the farm and also purchased protein blend feed, including forages silage and hay, and Ewe rolls (£310/tonne average) are also fed up to and during lambing time for sustenance of the ewe and lambs.

Sheep shearing £1.15/sheep;

Electronic ID tags £1.00/sheep;

Mineral licks average £1.50 per ewe;

Dosing, vaccinating and housing sheep during lambing averages £6.80/ewe.

Fuel and machinery depreciation at a rate of 10%

Fence maintenance at a price of £7 per meter average

The outputs and their values are:

Lambs sold for around £40 each as "store lambs for finishing".

Wool is sold for around £0.95/Kg (around £1.75 per fleece).

Income comes in the form of sales from the lambs and also from the Single Farm Payment subsidy system as well as the income from the arable enterprise.

Profit works out at £30 per lamb (2011) which, for 1600 lambs per year equates to £48000

There are no direct export links, however after the lambs have eventually gone through the process of being sold and slaughtered, meat and offal will mainly end up on the export market. Through the expression of better prices

obtained at the livestock market, purchasers prefer to buy the breeds of Beltex and Texel sheep for their better carcass conformation.

The farmer is marginally satisfied with the support of public institutions such as DEFRA or the National Farmers' Union (which, for example seems to be something you should be a part of but does not necessarily offer many benefits).

90% of the farm income is from farming activity and the farmer expressed himself satisfied with the income obtained from his sheep enterprise. In his free time he takes an interest in the activities of the Beltex sheep breeding society meetings and also spending time with his young family. He chose the life of a farmer because he was raised that way and has always had a passion for farming. He is 90% satisfied with his life, the main improvement to it would be to have more land as in the future he would like to increase the breeding ewe number to 2000. If anything, he would like to spend more time with his family and there would be less competition in the market place from imported lamb. His son is showing a keen interest, and the intentions are to leave the farm to the son and the four bedroom cottage on the farm to the daughter. His wife would like to open a farm shop in the future once the children are older.

Case Study 2: Extensive mixed sheep and beef farm where the sheep are raised for meat production

The interviewee is a 49 year old married farmer with three grown up daughters (23, 20 and 19) who all followed their father into agriculture. He was born in a village near Northallerton in North Yorkshire, England, and is the third of four brothers. He took over the family farm from his father and uncles after they retired, having been a tenant on another hill farm in Teesdale for several years before that. His other three brothers showed insufficient interest in farming and went on to other careers. The farm has been in the family since the 1870s. He left school at 16 and obtained an apprenticeship. He learnt how to farm from working with his father from an early age and from watching and learning and in his thirties attended a course with the British Wool Marketing Board. He has no further educational qualifications.

The sheep are a mix of Swaledale and North Country Cheviots, both breeds which are suited to the environment. The Swaledale is a local breed from North Yorkshire, while the Cheviot originated in Northumberland, further north near the Scottish border. The farm comprises almost 77 ha of enclosed land mainly in permanent pasture, meadow and fodder crops with a small area of recently planted woodland and there is 1011ha of open unenclosed common grazing moorland across two estates, one owned by the National Trust and one by a local landowner. The rights mean that this grazing comes completely free of any rents and has been attached to the farm for many generations. The Swaledale flock in particular is hefted to this grazing area. The land is situated on the scarp slope of a range of hills – the Cleveland Hills – with the moorland on the dip slope. Under the EU classification it is all Disadvantaged or Severely Disadvantaged. The land ranges from around 50m above sea level for the fields at the base of the escarpment rising to 370m above sea level at the top and over the moorland. The moorland comprises a mosaic of heather (*Calluna vulgaris*), bilberry (*Vaccinium myrtillus*) and bracken (*Pteridium aquilinum*), this latter being an invasive and toxic plant which has proved difficult to control.

The fields are enclosed mainly by post and wire fences although there are some dry stone walls along the edge of the moor dividing the inbye land from the moorland

The stock consists of 200 Swaledale and 200 North Country Cheviot breeding ewes and their followers plus a beef suckler herd comprising of 50 Galloway cross Shorthorn cows and their followers. For the sheep the lambing rates are on average 1 lamb per cheviot ewe (ones kept on the moorland) and 1.5 lambs per Swaledale ewe.

The mortality ratio is around 15% of lambs dying either at birth or within the first 3 weeks of life. Rams consist of seven Swaledale Rams, one Bluefaced Leicester Ram (for breeding Mule lambs from the Swaledale Ewes) and Six Cheviot Rams.

Fodder is grown on the farm for both cattle and sheep either in the form of hay or, if the season is wetter, as big-bale silage. Fodder crops for the sheep such as rape or turnips are also grown and straw for bedding is bought in.

The farmstead originally comprised a separate farm house and a range of sandstone buildings which were originally cow byres, storage barns, granaries and other general purpose farm buildings dating from the early to mid 18th century and which are now used as livestock sheds or storage barns. A modern sheep shed was built in the 1950's of steel and asbestos cement alongside a Dutch barn used for storing hay. A cubicle shed for cattle was also built in 2002, capable of housing 30 suckler cows over the winter months. There is also an implement shed built in 2002 which replaced one of the older ranges of buildings which was unsuitable for any modern use. These are made of steel and corrugated steel roofs.

Sheep handling pens capable of holding 200 ewes are also located on the main farmstead. There is also a dipping tub which is used to treat the sheep against external parasites such as ticks which are a problem on the moorland, especially in the bracken areas.

The buildings are generally kept in working order sufficient to serve their purpose. Recently some areas of concrete surfacing have been replaced and extended and some buildings modified to improve their functionality for overwintering of cattle. Manure from the wintering sheds is kept away from any water courses and is spread as fertiliser on the fields. Some artificial fertiliser and limited herbicides are used.

The farm has one main 150 Horse Power tractor for the main operations such as hay and silage making and for taking fodder to stock, and one smaller 35 Horse Power tractor for smaller tasks such as removing soiled bedding from buildings and taking fodder to sheep in the snow. Machinery for both enterprises comprises second-hand old machines consisting of one conventional hay baler, a tedder for making hay and a muck spreader. Any other machinery is hired in on a contract basis which is financially suited to the business

Meat production is the target market. The breeding ewes produce around 350 lambs which are sold on through local auction marts as store lambs for other farmers to finish. Some gimmer lambs are kept as breeding replacements and old ewes no use for reproducing are also sold through a local sheep sale. The sheep production is balance by the beef production enterprise – 54 spring born calves enter the production chain as well each year. Apart from the two compatible enterprises there is no other diversification, although sheep shearing demonstrations were tried as a means of raising income but not developed.

The farmer is the manager and is supported by his two younger daughters, supplemented by inputs from the third daughter who works elsewhere. Some activities such as hay baling, manure spreading and some sheep shearing are carried out by contractor – shearers from New Zealand travel around farms

and do some shearing which is partly due to the interviewee's contacts with New Zealand workers and because labour management such as sheep shearing and hay making operations often collide. The farmer also carries out some contract work at harvest time by driving a combine harvester and the daughters also have supplementary sources of income from a small sheep enterprise of their own and from some contract tractor driving. Both girls have a basic agricultural education from agricultural colleges while the eldest daughter has a degree in agriculture.

Inputs in the sheep enterprise:

Fodder is produced on farm

Sheep shearing £1.15/sheep;

Electronic ID tags £0.65/sheep;

Fertiliser, mineral licks, shearing and vaccines/medicines add up to around £10.00 per ewe and her lambs per year

Fuel and machinery depreciation at a rate of 7%

Fence maintenance on average costs around £6 per meter, due to the availability of surplus fencing resources on the farm. Contractor prices range up to £10 meter including labour.

Outputs are:

Store lambs are sold for around £65-70 each

Wool from the 400 ewes equates to around £600 per season.

This income is supplemented by that from the beef enterprise and also by Single Farm Payments for the enclosed land of £10-20 000 per year.

There are profits of £20 per lamb depending on the price at the time, so a total profit of £7000

All stock is sold via the local auction markets and there is a preference in both the home and export markets for lambs of 40+kg live weight.

The farmer is about 50% satisfied with the support of the public institutions. The bureaucracy involved in farming nowadays is very considerable and frustrating.

The farmer expressed his degree of satisfaction with the income obtained as being around 70%. He is of the opinion that that the business could be doing better by improving the moorland and overcoming problems of sheep theft and poor moorland management by the owners who use the heather moorland for commercial grouse shooting.

The interviewee states that he has little free time as the livestock are spread out over a series of small long roads, so much of his time is spent travelling to his flocks and tending to the ewes, looking after his cattle and in the summer he has a job as a contract combine harvester to bring in extra income to the business.

The farmer chose this profession because it is what he enjoys and he knows nothing else. He is 100% satisfied with this life and would not change his occupation – the only thing he would change if he could would be the weather!

The farmer is confident that one of his daughters will eventually take over the farm as they are all keen and hard working.

Case study 3: Semi-extensive organic lowland sheep farm

The interviewee is a 54 year old married farmer born in Salisbury, Wiltshire, in the south of England, although now farming in the north of England. He is the younger of two sons and took over the farm from his wife's parents who come from south Yorkshire. He has three grown up sons, 26, 24 and 20, one of whom works with him on the farm. His wife is a full time teacher at a local school. When he was 15, the interviewee left compulsory education and trained as an apprentice carpenter and has no other qualifications relevant to agricultural practices except what he has learned from the job and from working with his wife's parents.

The farm is located near Doncaster in south Yorkshire, is organic and is solely a sheep farm, there being no other enterprises. The breeds are Hampshire Down and Ryeland sheep, two relatively rare breeds whose conservation is one of the aims of the farmer as well as meat production. He has 54 Hampshire Down breeding ewes and 4 rams and 30 Ryeland breeding ewes and 3 rams He raises rams for sale as part of the business. The farm comprises 101.17 hectares of owned land, with no other land on other agreements. This is all subdivided into fields with post and wire fences and also iron railings along the drive to the entrance of the farm which has been kept to maintain the traditional characteristics of the farm. There is also 1 ha of woodland planted with a grant. The land is around 108m above seal level with a mixture of sandy loam and silty sand soil.

Lambing ratios are on average, the Ryelands 1.6 lambs and the Hampshire Down 1.75 lambs annually. The mortality rate is around 5% on average annually, usually within the first week of birth.

The farm has been in the ownership of the interviewee and his wife for the past 21 years since they bought it from his wife's parents. As well as the farmhouse there are two very small traditional stone buildings around 200 years old, and a large concrete and corrugated iron lambing shed which is mainly used for the over-winter storage of hay and shelter for livestock. As the hay is consumed by the flock, space is made available in the shed for when lambing time comes in April. The farm has mainly stock-proof fencing, with around 400m of hedges along the field boundaries surrounding the perimeters of the farm.

Being an Organic farm, any form of fertiliser must be sourced from the farm and cannot be bought from non-organic farms or other sources and spread on the land. For this reason red clover is abundant in the hay pastures in order to increase the nitrogen in the soil. There are also a number of wild flower plots dotted around the farm to promote farmland birds in conjunction with the sheep. All manure is kept on the farm and re-applied to the land as organic fertiliser. Emissions from tractors are relatively low because of the farms low dependence on machinery, being solely a sheep farm.

No conversion of products from sheep takes place directly on the farm, however the interviewee selects between five and 10 Hampshire Down lambs to be slaughtered and butchered in order to sell the meat directly to local people via newspaper and local advertisements. Around three to five breeding rams are also sold privately direct from the farm annually. The rest of the breeding ewes and rams are sold at breed society sales.

There is no agro-tourism as such. However the wife of the interviewee is looking into starting up a camping business based on tepees to be set up around the area of newly planted woodland. This plan could only take place if the youngest son still intends to work for the family business.

The interviewee is a full-time manager of the business. There are three workers on the farm: the interviewee, his wife (who manages the paperwork, and works un-paid on a part-time basis), and the youngest son who is heavily involved in the stock breeding side of the business, and at lambing and other intensive work periods.

The farm can be described as semi-subsistence, borderline commercial. The interviewee stated that although the sheep are profitable, the subsidy money from the Single Farm Payment keeps the business afloat.

All lambs are sold through livestock auction markets, and selected ram and ewe lambs for breeding are kept to sell at Hampshire Down and Ryeland breed shows and sales. Approximately 10 ram lambs and 40 ewe lambs are selected and sold specifically at breeder's shows, sales and through private contacts for a premium price as breeding stock. The remaining lambs are sold either as butchered lamb chops and meat (the selected ones sold locally as end products), or live through the local auction market.

Inputs are:

Fodder is produced on the farm

Sheep shearing £1.15/sheep;

Electronic ID tags £0.65/sheep;

Fertiliser, mineral licks, and vaccines/medicines are not permitted under organic rules so there is no cost except for emergencies in the case of veterinary medicines

Fuel and machinery depreciation at a rate of around 10%

Fence maintenance is not costed into the enterprise as it is an infrequent task

Outputs are:

Breeding ram lambs and ewe lambs are sold for prices between £150-£300 each at breed sales and through private contacts. Mature Hampshire Down rams have been sold for prices around £1,500 each in the past, breeding ewes for up to £200 each.

Store lambs (lambs which are 10kg light of being "fat" and finished) are sold for around £50-70 each at auction markets, while old "cull" ewes no longer useful for breeding (around 5 years old) sold for around £60 each.

Wool from the 84 ewes sells in total for around £100 per season. Being an organic flock, veterinary medicines aren't bought, and only used in an emergency which is permitted.

Profits are around £50 per ewe per year, calculated from the sale of lambs, approximately 70 Hampshire Down lambs and around 20 Ryeland lambs, and also the high prices for breeding stock and minimal inputs. The combination of the Organic Entry Level Stewardship environmental scheme money and Single Farm Payment Subsidy provides the farm with an additional income of around £25,000 per year. 55% of the farm income comes from farm activity. The remaining 45% comes from the interviewee's wife's job as a teacher.

In terms of the degree of satisfaction with public institutions support the interviewee expressed this as 70%. He felt that the UK Agricultural industry should be doing more to promote the Hampshire Down and Ryeland breeds to the public.

The interviewee and his family are very proud of what they have achieved breeding sheep together, and the income from the sheep enterprise is an added bonus. In their opinion, farming organically and preserving two traditional breeds gives an enormous sense of self satisfaction that cannot be matched with high levels of income.

Socialising on a Saturday night with his wife in their local pub with the neighbours is usually what happens on a weekend. During the summer months, the interviewee, his wife and their youngest son tour around the UK attending most of the county and regional agricultural shows to exhibit their Hampshire Down and Ryeland prize winning rams and ewes. The interviewee has also carried on practising his trade as a carpenter on a "hobby" basis for a little extra income.

Farming sheep and being part of breed societies felt more fulfilling to the interviewee and his wife's lives when they started out, and as the children were born the lifestyle fitted with their family beliefs. Although the wife is employed off the farm holding and brings in around 45% of the family's income, farming and managing the sheep, regardless of money is what brings happiness to the family.

The interviewee expressed himself- 100% satisfied with his life as a sheep farmer and has never considered changing his occupation - he would like to carry on his profession until he eventually dies! He would not change his profession apart from possibly raising the public's awareness of the Hampshire Down and Ryeland sheep breeds to encourage more people to buy breeding stock and meat.

In terms of succession planning, the youngest son has shown a lot of interest in taking over the family farm in the future. The current intentions are to split the farm three ways between the three sons, leaving the sheep flock to the

youngest son, and possibly the house. The two older sons have successful careers as an architect and geography teacher and would not gain anything other than financial benefits if the whole estate was divided equally between the sons.

Expansion of the Hampshire Down and Ryeland flocks is definitely one of the farm businesses primary aims, apart from this, there no intentions to stop farming.